

REMARKS / ARGUMENTS

Claims 1, 10-16, and 20-26 are pending in this application. By this Amendment, Applicant AMENDS the specification and claims 1, 20, 21, 24, and 25 and CANCELS claims 17-19, 27, and 28.

Applicant affirms the election without traverse of Species 1: Figs. 2A and 2B. Claims 13 and 20-23 read on the elected species and claim 1 is generic. Claims 14, 15, 24, and 25 are currently withdrawn as reading on non-elected species. Applicant respectfully requests that the Examiner rejoin and allow withdrawn claims 14, 15, 24, and 25 when generic claim 1 is allowed.

Applicant greatly appreciates the Examiner extending the courtesy of a telephone interview on April 14, 2006 to discuss the prior art rejection of claim 18.

Applicant appreciates the Examiner's indication that claim 20 would be allowable if rewritten in independent form including all of the features of the base claim and any intervening claims.

Claim 20 has been rewritten in independent form including all of the features of the base claim and any intervening claims. Accordingly, Applicant respectfully submits that claim 20 is allowable. Claims 21 and 22 depend upon allowable claim 20, and are therefore allowable for at least the reasons that claim 20 is allowable.

Claim 27 was rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement. While Applicant does not agree with the appropriateness of the rejection, Applicant has canceled claim 27 so as to advance prosecution.

Claims 1, 10-13, 16-19, 21-23, and 26-28 were rejected under 35 U.S.C. § 102(e) as being anticipated by Takanashi et al. (U.S. 2004/0113708). Claims 17-19, 27, and 28 have been canceled. Applicant respectfully traverses the rejection of claims 1, 10-13, 16, 23, and 26.

Claim 1 has been amended to recite:

A crystal oscillator device comprising:
a crystal resonator having a resonator package, the resonator package including a resonating member and a retaining member supporting the resonating member in the resonator package;

a circuit board having an oscillator circuit;
at least one supporting member arranged between the resonator package and the circuit board to support the resonator package above the circuit board such that the resonator package is spaced away from the circuit board, wherein at least one portion of at least one side of the resonator package is not supported by the at least one supporting member; and
a vibrational energy absorbing member made of a vibrational energy absorbing material arranged between the resonator package and the circuit board so as to absorb vibrational energy of the resonator package; wherein
the vibrational energy absorbing member provides no electrical connection between the resonating member and the oscillating circuit.
(emphasis added)

Support for the feature of “the vibrational energy absorbing member provides no electrical connection between the resonating member and the oscillating circuit” can be found on, for example, page 5 lines 22-23, page 6 lines 11-13, and page 10 lines 16-18 of the originally filed specification.

Page 5 lines 22-23 of Applicants’ originally filed specification disclose that the “supporting members 8 not only support the crystal resonator 2, but also provide electrical connection between the crystal resonator 2 and circuits provided on the circuit board 6.” Thus, the supporting members 8 provide the electrical connection between the crystal resonator and the circuit board. By contrast, this implies that the resin member (the vibrational energy absorbing member) 10 does not provide an electrical connection between the crystal resonator 2 and the circuit board 6.

Page 6 lines 11-13 of Applicants’ originally filed specification disclose that “resonator package 3 is supported above the circuit board 6 by the supporting members 8 in a cantilever manner.” Because the resonator package 3 is supported only by the supporting members 8 in a cantilever manner (that is, supported at only one end of the resonator package 3), the resin member 10 does not support the resonator package, and therefore cannot not provide an electrical connection between the crystal resonator 2 and the circuit board 6.

Lastly, page 10 lines 16-18 of Applicants’ originally filed specification disclose that when “the resin members 10 are omitted, there is a possibility that the bottom surface of the resonator package will come into contact with the circuit board 6 or a

portion of the circuit component 9 mounted on the circuit board 6.” This sentence emphasizes that the resin members 10 do not support or provide an electrical connection to the resonator package 3, but only dampen vibrations and prevent the vibrating resonator package from contacting the circuit board 6 during the vibrations.

Accordingly, Applicant respectfully submits that the feature of “the vibrational energy absorbing member provides no electrical connection between the resonating member and the oscillating circuit” is supported by the originally filed specification. Applicant has amended the paragraph bridging pages 6 and 7 in the specification to provide antecedent basis for the specific language recited in amended claim 1, which is, as stated above, fully supported by the originally filed specification.

In rejecting claim 18 under 35 U.S.C. § 102(e) as being anticipated by Takanashi et al., the Examiner failed to address the feature of “the vibrational energy absorbing member provides no electrical connection between the resonating member and the oscillating circuit” recited therein. Applicant has amended claim 1 to include all of the features of claims 17 and 18, including the feature of “the vibrational energy absorbing member provides no electrical connection between the resonating member and the oscillating circuit.”

In contrast, Takanashi et al. specifically teach that the supports 55, which the Examiner alleged correspond to the vibrational energy absorbing member recited in claim 1 as amended herein, provide both a mechanical and an electrical connection between the resonating member 41 and the circuit board 32. Takanashi et al. disclose in paragraph [0059]:

FIGS. 5(a) and (b) show a longitudinal section and an exploded perspective view of the third embodiment of the piezoelectric oscillator according to the present invention. The piezoelectric oscillator shown in the figures comprises a circuit board 32 with circuit components 33 making up an oscillating circuit and a temperature-compensating circuit mounted on the lands 35 formed on the top side and external terminals 34 formed on the bottom side and a crystal vibrator 41 held above the top side of the circuit board 32 with a predetermined space by columnlike supports 55 fixed to the top side of the circuit board 32. **The bottom terminals 56 on the bottoms of the columnlike supports 55 are mechanically and electrically fixed to the support-fixing lands 57**

formed on the top side of the circuit board 32, and **the top terminals 58 on the tops of the columnlike supports 55 are mechanically and electrically** fixed to the bottom terminals 46 of the crystal vibrator 41. (emphasis added)

Thus, the columnlike supports 55 of Takanashi et al. clearly provide an electrical connection between the crystal vibrator (resonator) 41 and the circuit board 32.

Accordingly, Takanashi et al. fail to teach or suggest the feature of “the vibrational energy absorbing member provides no electrical connection between the resonating member and the oscillating circuit,” as recited in Applicant’s claim 1.

Accordingly, Applicant respectfully requests reconsideration and withdrawal of the rejection of claim 1 under 35 U.S.C. § 102(e) as being anticipated by Takanashi et al.

Applicant respectfully submits that amended claim 1 raises no new issues because all of the features recited therein were previously presented. Accordingly, Applicant respectfully submits that this amendment should be entered. Furthermore, Applicant respectfully submits that claim 18 should **not** have been rejected under 35 U.S.C. § 102(e) as being anticipated by Takanashi et al. in the Final Office Action.

During the telephone interview on April 14, 2006, the Examiner indicated that he would reconsider the rejection of claim 18 in view of the explicit teachings of Takanashi et al. that the columnlike supports 55 provide an electrical connection between the crystal vibrator 41 and the circuit board 32.

In view of the foregoing amendments and remarks, Applicant respectfully submits that claim 1 is allowable. Claims 10-13, 16, 23, and 26 depend upon allowable claim 1, and are therefore allowable for at least the reasons that claim 1 is allowable. Claims 20-22 are allowable for the reasons stated above.

In addition, as noted above, claim 1 is generic. Accordingly, Applicant respectfully requests that the Examiner rejoin and allow withdrawn claims 14, 15, 24, and 25.

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In view of the foregoing amendments and remarks, Applicant respectfully submits that this application is in condition for allowance. Favorable consideration and prompt allowance are solicited.

To the extent necessary, Applicant petitions the Commissioner for a One-month Extension of Time, extending to April 22, 2006, the period for response to the Office Action dated December 22, 2005.

The Commissioner is authorized to charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-1353.

Respectfully submitted,

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